



Summary of Rules for Childhood Immunization*

(Adapted from ACIP, AAP, and AAFP by the Immunization Action Coalition, interim update March 2002)

Vaccine	Ages usually given and other guidelines	If child falls behind (minimum intervals)	Contraindications (Remember: mild illness is not a contraindication)
DTaP (Diphtheria, tetanus, acellular pertussis) Give IM	<ul style="list-style-type: none"> DTaP is recommended for all doses in the series. Give at 2m, 4m, 6m, 15–18m, 4–6yrs of age. May give #1 as early as 6wks of age. May give #4 as early as 12m of age if 6m have elapsed since #3 and the child is unlikely to return at age 15–18m. Do not give DTaP to children ≥7yrs of age (give Td). May give with all other vaccines but as a separate injection. It is preferable but not mandatory to use the same DTaP product for all doses. 	<ul style="list-style-type: none"> #2 & #3 may be given 4wks after previous dose. #4 may be given 6m after #3. If #4 is given before 4th birthday, wait at least 6m for #5 (4–6yrs of age). If #4 is given after 4th birthday, #5 is not needed. DO NOT restart series, no matter how long since previous dose. 	<ul style="list-style-type: none"> Anaphylactic reaction to a prior dose or to any vaccine component. Moderate or severe acute illness. Don't postpone for mild illness. Previous encephalopathy within 7d after DTP/DTaP. <p>Precautions for DTaP: The following are precautions, not contraindications. Generally when these conditions are present, the vaccine shouldn't be given. But in situations when the benefit outweighs the risk (e.g., community pertussis outbreak), vaccination should be considered.</p> <ul style="list-style-type: none"> T ≥ 105 °F (40.5 °C) within 48hrs after previous dose. Continuous crying lasting ≥ 3hrs within 48hrs after previous dose. Previous convulsion within 3d after immunization. Pale or limp episode or collapse within 48hrs after previous dose. Unstable progressive neurologic problem (defer until stable).
DT Give IM	<ul style="list-style-type: none"> Give to children <7yrs of age if child had a serious reaction to "P" in DTaP/DTP or if parents refuse the pertussis component. May give with all other vaccines but as a separate injection. 		
Td Give IM	<ul style="list-style-type: none"> Use for persons ≥7yrs of age. A booster dose is recommended for children 11–12yrs of age if 5yrs have elapsed since last dose. Then boost every 10yrs. May give with all other vaccines but as a separate injection. 	For those never vaccinated or with an unknown vaccination history: dose #1 is given now, dose #2 is given 4wks later, dose #3 is given 6m after #2, then give booster dose every 10yrs. continued ►	<ul style="list-style-type: none"> Anaphylactic reaction to a prior dose or to any vaccine component. Moderate or severe acute illness. Don't postpone for minor illness. <p>DO NOT restart series, no matter how long since previous dose.</p>
MMR (Measles, mumps, rubella) Give SC	<ul style="list-style-type: none"> Give #1 at 12–15m of age. Give #2 at 4–6yrs of age. Make sure that all children (and teens) over 4–6yrs of age have received both doses of MMR. If a dose was given before 12m of age it doesn't count as the first dose, so give #1 at 12–15m of age with a minimum interval of 4wks between these doses. If MMR and Var (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. May give with all other vaccines but as a separate injection. 	<ul style="list-style-type: none"> 2 doses of MMR are recommended for all children ≤18yrs of age. Dose should be given whenever it is noted that a child is behind. Exception: If MMR and Var (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. There should be a minimum interval of 28d between MMR #1 and MMR #2. Dose #2 can be given at any time if at least 28d have elapsed since dose #1 and both doses are administered after 1yr of age. DO NOT restart the series, no matter how long since previous dose. 	<ul style="list-style-type: none"> Anaphylactic reaction to a prior dose or to any vaccine component. Pregnancy or possibility of pregnancy within 4 weeks (use contraception). Moderate or severe acute illness. Don't postpone for minor illness. If blood, plasma, or immune globulin were given in past 11m, see ACIP recommendations or <i>2000 Red Book</i> (p.390) re: time to wait before vaccinating. HIV is NOT a contraindication unless severely immunocompromised. Immunocompromised persons (e.g., because of cancer, leukemia, lymphoma). <p>Note: For patients on high-dose immunosuppressive therapy, consult ACIP recommendations regarding delay time.</p> <p>Note: MMR is not contraindicated if a PPD test was recently applied. If PPD and MMR weren't given on same day, delay PPD for 4–6wks after MMR.</p>
Varicella (Var) (Chickenpox) Give SC	<ul style="list-style-type: none"> Routinely give at 12–18m of age. Vaccinate all children ≥12m of age including all adolescents who have not had chickenpox. May use as postexposure prophylaxis if given within 3–5d. If Var and MMR (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. May give with all other vaccines but as a separate injection. 	<ul style="list-style-type: none"> Do not give to children <12m of age. Susceptible children <13yrs of age receive 1 dose. Susceptible persons ≥13yrs of age receive 2 doses 4–8wks apart. DO NOT restart series, no matter how long since previous dose. 	<ul style="list-style-type: none"> Anaphylactic reaction to a prior dose or to any vaccine component. Moderate or severe acute illness. Don't postpone for minor illness. Pregnancy or possibility of pregnancy within 1m. If blood, plasma, or immune globulin (IG or VZIG) were given in past 5m, see ACIP recommendations or AAP's <i>2000 Red Book</i> (p.390) re: time to wait before vaccinating. Persons immunocompromised due to high doses of systemic steroids, cancer, leukemia, lymphoma, or immunodeficiency. Note: For patients with humoral immunodeficiency, HIV infection, or leukemia, or for patients on high doses of systemic steroids, consult ACIP recommendations. For use in children taking salicylates, consult ACIP recommendations.
Influenza	There are children ≥6m of age for whom influenza vaccine is recommended. Give IM. Consult the current year's ACIP statement <i>Prevention and Control of Influenza</i> for details.		
Mening.	Meningococcal disease risk and vaccine availability should be discussed with college students. Give SC. Consult the ACIP statement <i>Meningococcal Disease and College Students</i> (6/30/00) for details.		

*The newer combination vaccines are not listed on this table but may be used whenever administration of any component is indicated and none is contraindicated. Read package inserts. For detailed information, see the ACIP statements which are published in the *MMWR*. To obtain, visit www.cdc.gov/nip/publications/ACIP-list.htm or visit the Immunization Action Coalition's (IAC) website at www.immunize.org/acip For recommendations of American Academy of Pediatrics (AAP), consult AAP's *2000 Red Book* and the journal *Pediatrics*, www.aap.org or visit www.immunize.org/aap

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Summary of Rules for Childhood Immunization (continued)

Vaccine	Ages usually given and other guidelines	If child falls behind (minimum intervals)	Contraindications (Remember: mild illness is not a contraindication)
Polio (IPV) Give SC or IM	<ul style="list-style-type: none"> • Give at 2m, 4m, 6–18m, and 4–6yrs of age. • May give #1 as early as 6wks of age. • Not routinely recommended for those ≥18yrs of age (except certain travelers). • May give with all other vaccines but as a separate injection. 	<ul style="list-style-type: none"> • All doses should be separated by at least 4wks. • #4 is given at 4–6yrs of age. • If #3 of an all-IPV or all-OPV series is given at ≥4yrs of age, dose #4 is not needed. • Those who receive a combination of IPV and OPV doses must receive all 4 doses. • DO NOT restart series, no matter how long since previous dose. 	<ul style="list-style-type: none"> • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Hib Give IM	<ul style="list-style-type: none"> • HibTITER (HbOC) & ActHib or OmniHib (PRP-T): give at 2m, 4m, 6m, 12–15m. • PedvaxHIB (PRP-OMP): give at 2m, 4m, 12–15m. • Dose #1 of Hib vaccine may be given as early as 6wks of age but no earlier. • May give with all other vaccines but as a separate injection. • Hib vaccines are interchangeable. • Any Hib vaccine may be used for the booster dose. • Hib is not routinely given to children ≥5yrs of age. 	<p>Rules for all Hib vaccines:</p> <ul style="list-style-type: none"> • The last dose (booster dose) is given no earlier than 12m of age and a minimum of 2m after the previous dose. • For children ≥15m and <5yrs of age who have never received Hib vaccine, give only 1 dose. • DO NOT restart series, no matter how long since previous dose. <p>Rules for HbOC (HibTITER) & PRP-T (ActHib, OmniHib) only:</p> <ul style="list-style-type: none"> • #2 and #3 may be given 4 wks after previous dose. • If #1 was given at 7–11m, only 3 doses are needed; #2 is given 4–8wks after #1, then boost at 12–15m. • If #1 was given at 12–14m, give a booster dose in 2m. continued ► 	<ul style="list-style-type: none"> • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness. <p>.....</p> <p>(continued from previous column)</p> <p>Rules for PRP-OMP (PedvaxHib) only:</p> <ul style="list-style-type: none"> • #2 may be given 4wks after dose #1. • If #1 was given at 12–14m, boost 8wks later.
Hep-B Give IM	<ul style="list-style-type: none"> • Vaccinate all infants at birth before hospital discharge. Give dose #2 at 1–4m, and dose #3 at 6–18m. After the first dose, the hep B series may be completed with single-antigen vaccine or up to 3 doses of Comvax, e.g., 2m, 4m, 12m of age. Dose #1 of hep B vaccine can be given as late as 2 mos of age if the mother is assured to be HBsAg negative, but this is not the preferred schedule. • Vaccinate all children 0 through 18yrs of age. • For older children/teens, spacing options include: 0, 1, 6m; 0, 2, 4m; 0, 1, 4m. • Children born (or whose parents were born) in countries of high HBV endemicity or who have other risk factors should be vaccinated ASAP. • If mother is HBsAg positive: give HBIG and hep B #1 within 12hrs of birth, #2 at 1–2m, and #3 at 6m of age. • If mother's HBsAg status is unknown: give hep B #1 within 12hrs of birth, #2 at 1–2m, and #3 at 6m of age. If mother is later found to be HBsAg positive, her infant should receive HBIG within 7d of birth. • May give with all other vaccines but as a separate injection. 	<ul style="list-style-type: none"> • DO NOT restart series, no matter how long since previous dose. • 3-dose series can be started at any age. • Minimum spacing for children and teens: 4wks between #1 & #2, and 8wks between #2 & #3. Overall there must be ≥16wks between #1 & #3. • Last dose in hep B series should not be given earlier than 6m of age. <p>Dosing of hepatitis B vaccines: Vaccine brands are interchangeable for 3-dose schedule. For Engerix-B, use 10mcg for 0 through 19yrs of age. For Recombivax HB, use 5mcg for 0 through 19yrs of age.</p> <p>Alternative dosing schedule for adolescents aged 11 through 15yrs: For Recombivax HB <i>only</i>, use 10mcg (adult dose) in two doses spaced 4–6m apart. May only be given to adolescents 11 through 15yrs of age.</p>	<ul style="list-style-type: none"> • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Hep-A Give IM	<ul style="list-style-type: none"> • Vaccinate children ≥2yrs old who live in areas with consistently elevated rates of hepatitis A, as well as children who have specific risk factors. (See ACIP statement and column 2 of this table for details.) • Children who travel outside of the U.S. (except Western Europe, New Zealand, Australia, Canada, or Japan). • Give dose #2 a minimum of 6m after dose #1. • Dose #1 may not be given earlier than 2yrs of age. • May give with all other vaccines but as a separate injection. 	<ul style="list-style-type: none"> • DO NOT restart series, no matter how long since previous dose. • The minimum interval between dose #1 and #2 is 6m. • Hepatitis A vaccine brands are interchangeable. • Consult your local or state public health authority for information regarding your city, county, or state hepatitis A rates. States with consistently elevated rates (average ≥10 cases per 100,000 population from 1987-1997) include the following: AL, AZ, AK, CA, CO, ID, MO, MT, NV, NM, OK, OR, SD, TX, UT, WA, and WY. 	<ul style="list-style-type: none"> • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Pneumo-coccal conjugate (PCV7) Give IM	<ul style="list-style-type: none"> • Give at 2m, 4m, 6m, and 12–15m of age. Dose #1 may be given at 6wks of age. • For children age 24–59m of age, give 2 doses to high-risk children, and consider 1 dose for moderate-risk children. (See box below for list of high- and moderate-risk children.) • If both PCV7 and PPV23 are indicated, PPV23 is given ≥8wks after PCV7. • May give 1 dose to unvaccinated healthy children 24–59m. • PCV7 not routinely given to children ≥5 years of age. • May give with all other vaccines but as a separate injection. <p>.....</p> <p>High-risk children: Those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes mellitus; CSF leak; HIV infection; or immunosuppression. Moderate-risk children: Children aged 24–35m; children aged 24–59m who attend group daycare centers or are of Alaska Native, American Indian, or African American descent.</p>	<ul style="list-style-type: none"> • Minimum interval for infants ≤12m of age is 4wks, for >12m of age is 8wks. • For infants 7–11m of age: If unvaccinated, give dose #1 now, give dose #2 4–8wks later, and boost at 12–15m. If infant has had 1 or 2 previous doses, give next dose now, and boost at 12–15m. • For infants 12–23 months: If not previously vaccinated or only one previous dose before 12m, give 2 doses ≥8wks apart. If infant previously had 2 doses, give booster dose ≥8 wks after previous dose. • DO NOT restart series, no matter how long since previous dose. 	<ul style="list-style-type: none"> • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
PPV23	There are children ≥2yrs of age for whom pneumococcal polysaccharide vaccine (PPV23) is recommended. Give IM or SC. Consult the ACIP statement <i>Prevention of Pneumococcal Disease (4/4/97)</i> for details.		